

In the Claims:

1. – 62. (Cancelled)

63. (Original) A method of making a transgenic plant cell having increased quinolate phosphoribosyl transferase (QPRTase) expression, said method comprising:

providing a plant cell of a type known to express quinolate phosphoribosyl transferase;
providing an exogenous DNA construct, which construct comprises, in the 5' to 3' direction, a promoter operable in a plant cell and a DNA sequence encoding quinolate phosphoribosyl transferase, said DNA sequence operably associated with said promoter; and
transforming said plant cell with said DNA construct to produce transformed cells, said plant cell having increased expression of QPRTase compared to an untransformed cell.

64. (Original) The method of claim 63, wherein said plant cell is *Nicotiana tabacum*.

65. (Original) The method of claim 63, further comprising regenerating a plant from said transformed plant cell.

66. (Original) A method according to claim 63, wherein said promoter is constitutively active.

67. (Original) A method according to claim 63, wherein said promoter is selectively active in plant root tissue cells.

68. (Original) A method according to claim 63, wherein said promoter is selectively active in plant root cortex tissue cells.

69. (Original) A method according to claim 63, wherein said transforming step is carried out by bombarding said plant cell with microparticles carrying said DNA construct.

70. (Original) A method according to claims 63 wherein said transforming step is carried out by infecting said plant cell with an *Agrobacterium tumefaciens* containing a Ti plasmid carrying said DNA construct.

71. (Original) A method of producing transgenic tobacco seeds, comprising collecting seed from a transgenic tobacco plant produced by the method of claim 63.

72. (Original) The method according to claim 63, wherein said DNA sequence comprises the quinolate phosphoribosyl transferase encoding sequence of SEQ ID NO:1.

73. (Original) The method according to claim 63, wherein said exogenous DNA sequence comprises a quinolate phosphoribosyl transferase encoding sequence selected from the DNA sequences of Claim 1.

74. (Original) A transgenic plant of the species *Nicotiana* having increased quinolate phosphoribosyl transferase (QPRTase) expression relative to a non-transformed control plant, said transgenic plant comprising transgenic plant cells containing:

an exogenous DNA construct comprising, in the 5' to 3' direction, a promoter operable in said plant cell and a DNA sequence encoding a plant quinolate phosphoribosyl transferase, said DNA operably associated with said promoter;

said plant exhibiting increased QPRTase expression compared to a non-transformed control plant.

75. (Original) The method according to claim 74, wherein said DNA sequence comprises the quinolate phosphoribosyl transferase encoding sequence of SEQ ID NO:1.

76. (Original) A plant according to claim 74, wherein said promoter is a constitutively active promoter.

77. (Original) A method according to claim 74, wherein said promoter is selectively active in plant root tissue cells.

78. (Original) A method according to claim 74 wherein said promoter is selectively active in plant root cortex tissue cells.

79. (Original) A transgenic plant according to claim 74, which plant is *Nicotiana tabacum*.

80. (Original) A transgenic plant of the species *Nicotiana* having increased quinolate phosphoribosyl transferase (QPRTase) expression relative to a non-transformed control plant, wherein said transgenic plant is a progeny of a plant according to claim 74.

81. (Original) Seeds of a transgenic plant of the species *Nicotiana* having increased quinolate phosphoribosyl transferase (QPRTase) expression relative to a non-transformed control plant, wherein said transgenic plant is a plant according to claim 74 or a progeny thereof.

82. (Original) A crop comprising a plurality of plants according to claim 74 planted together in an agricultural field.

83. (Original) A method for increasing expression of a quinolate phosphoribosyl transferase gene in a plant cell, said method comprising:
growing a plant cell transformed to contain exogenous DNA, wherein said exogenous DNA encodes quinolate phosphoribosyl transferase.

84. (Original) The method of claim 83, wherein said plant cell is *Nicotiana tabacum*.

85. (Original) The method according to claim 83, wherein said transformed plant cell is obtained by a method comprising:
integrating into the genome of a host plant cell a construct comprising, in the direction of transcription, a promoter functional in said plant cell, a DNA sequence encoding quinolate phosphoribosyl transferase functional in said cell, said DNA sequence operably associated with said promoter, and a transcriptional termination region functional in said cell, whereby a transformed plant cell is obtained.

86. (Original) A method according to claim 85, wherein said promoter is constitutively active.

87. (Original) A method according to claim 85 wherein said promoter is selectively active in plant root tissue cells.

88. (Original) A method according to claim 85, wherein said promoter is selectively active in plant root cortex tissue cells.

89. (Original) The method according to claim 83, wherein said DNA sequence comprises the quinolate phosphoribosyl transferase encoding sequence of SEQ ID NO:1.

90. (Original) The method according to claim 83, wherein said exogenous DNA sequence comprises a quinolate phosphoribosyl transferase encoding sequence selected from the DNA sequences of Claim 1.

91. (Original) A method of producing a tobacco plant having increased levels of nicotine in leaves of said tobacco plant, said method comprising:

growing a tobacco plant, or progeny plants thereof, wherein said plant comprises cells containing a DNA construct comprising a transcriptional initiation region functional in said plant and an exogenous DNA sequence operably joined to said transcriptional initiation region, wherein said DNA sequence encodes quinolate phosphoribosyl transferase functional in said cells.

92. (Original) The method according to claim 91, wherein said DNA sequence comprises the quinolate phosphoribosyl transferase encoding sequence of SEQ ID NO:1.

93. (Original) The method according to claim 91, wherein said exogenous DNA sequence comprises a quinolate phosphoribosyl transferase encoding sequence selected from the DNA sequences of Claim 1.